CLAIMS:

1. A method for combining images of the same object including the steps of:

- seeking contours representing an interface on the images to be combined, said search step being intended to define interest areas close to said representative contours,

- analyzing interest areas, said analysis step being intended to allocate weights to the points in said interest areas and to the points corresponding to said interest areas on the various images,

- constructing a combination image, a point on the combination image corresponding to a point on at least one interest area being obtained from a weighting of the corresponding points on the images to be combined according to the weights allocated in said analysis step.

2. A method as claimed in claim 1, characterized in that the analysis step uses a step of evaluating similarity of the interest areas on the images to be combined, the weights being allocated to the various points in said interest areas and to their corresponding points according to said similarity.

3. A method as claimed in claim 2, characterized in that the analysis step uses a step of estimating the contrast within at least two interest areas present and similar on two images, the weights being allocated to the various points in said interest areas according to said estimated contrast.

4. A method as claimed in claim 2, characterized in that at least two images to be combined have different resolutions and in that the analysis step uses a step of evaluating these resolutions within at least two interest areas present and similar on two said images, the weights being allocated to the various points in said interest areas on said two images according to said resolutions.

5. A device intended to be integrated in an ultrasonic imaging apparatus and intended to form a combination image, the result of a spatial combination of images of the same object, including means of:

- seeking contours representing an interface on the images to be combined, said search step being intended to define interest areas close to said representative contours,
- analyzing interest areas, said analysis step being intended to allocate weights to the points in said interest areas and to the points corresponding to said interest areas on the various images,
- constructing a combination image, a point on the combination image corresponding to a point on at least one interest area being obtained from a weighting of the corresponding points on the images to be combined according to the weights allocated in said analysis step.

6. A device as claimed in claim 5, characterized in that the analysis means use means of evaluating a similarity of the interest areas on the images to be combined, the weights being allocated to the various points in said interest areas and to their corresponding points according to said similarity.

7. A device as claimed in claim 6, characterized in that the analysis means use means of estimating the contrast within at least two interest areas present and similar on two images, the weights being allocated to the various points in said interest areas according to said estimated contrast.

8. A device as claimed in claim 6, characterized in that at least two images to be combined have a different resolution and in that the analysis means use means of evaluating these resolutions in at least two interest areas present and similar on two said images, the weights being allocated to the various points in said interest areas on said two images according to said resolutions.

9. An ultrasonic imaging apparatus including a device intended to form a combination image, the result of a spatial combination of images of the same object, as claimed in one of claims 5 to 8.